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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/709,610

05/18/2004

Zheng Wang

ACMP0084USA

3609

27765

7590

02/14/2006

NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION
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MERRIFIELD, VA 22116

EXAMINER

CARTER, WILLIAM JOSEPH

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/709,610

Applicant(s)

WANG, ZHENG

Examiner

William J. Carter

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities:

In claim 1, lines 4-6, "a length running substantially parallel to the line except at the protrusion where the length is angled with respect to the line" is unclear and the examiner requests clearer description.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (2,567,561) in view of Witte et al. (6,831,759).

With respect to claims 1, 3, 5, and 8-10, Hoffman teaches a linear light source (17) having a length along a line (Fig. 2) for generating light; a reflecting piece (45) for reflecting light from the light source, the reflective piece located on a first side of the light source having a length running substantially parallel to the line (Fig. 3); a lens (16) for transmitting light from the light source and the reflective piece (Fig. 2), the lens located on a second side which is opposite the first side, of the light source (Fig. 2). Hoffman does not explicitly teach a reflector including one protrusion that is angled with

Art Unit: 2875

respect to a line of generated light and a sensor for detecting the light from a lens; the protrusion of the reflective piece is triangular; the scanner is a flatbed scanner; the reflective piece comprises two protrusions located at two sides of the reflecting piece for reflecting the part of the light from the light source to the two sides of the light source; the light source is a fluorescent tube; and the sensor is a charge coupled device. Witte, also drawn to scanners, teaches a reflective piece (110) including one protrusion (114) that is angled with respect to a line of generated light (Fig. 2) and a sensor (72) for detecting the light from a lens (70); the reflective piece comprises two protrusions (112A and 112B) located at two sides of the reflecting piece for reflecting the part of the light from the light source (64A or 64B) to the two sides of the light source (Fig. 2); the protrusion (114) of the reflective piece (110) is triangular (Fig. 2); the scanner (60) is a flatbed scanner (Fig. 6); the light source (64A or 64B) is a fluorescent tube (column 3, lines 1-4); and the sensor (72) is a charge coupled device (CCD) (column 3, lines 12-14). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the reflector configuration and scanner hardware of Witte with the light of Hoffman, in order to create a scanner that eliminates problems with flare and degraded image quality (Abstract).

As for claim 4 Hoffmann further teaches a reflective piece (column 4, line 45) with a dark section (24) decreasingly distributed from the center to the two sides of the reflective piece for absorbing part of the light from the light source (column 4, lines 53-62).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman and Witte as applied to claim 1 above, and further in view of Edwards, Jr. (6,092,913).

With respect to claim 2, Hoffman and Witte teach all of the claimed elements, as disclosed above. Also Witte teaches a protrusion (114) being located at the center of the reflective piece (110) (Fig. 2). Witte does not teach the protrusion of the reflective piece is for reflecting part of the light from the light source to two sides of the light source. Edwards, drawn to fluorescent lighting and desiring even lighting, teaches a reflective piece (44) with a protrusion (98) for reflecting part of the light from the light source (42) to two sides of the light source (Fig. 5). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the protrusion of Edwards in the light of Hoffman, in order to provide lighting with high efficiency and a low profile (Abstract).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman and Witte as applied to claim 1 above, and further in view of Verfueth (6,585,396).

With respect to claim 6, Hoffman and Witte teach all of the claimed elements, as disclosed above, except for the protrusion of the reflective piece is arc-shaped. Verfueth, drawn to fluorescent lighting, shows a reflective piece (4") has protrusions (protrusion between items 4") that are arc-shaped (Fig. 2). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the protrusions of Verfueth in the light of Hoffman, in order to better reflect tube light away from the reflector (column 1, lines 42-44).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman and Witted as applied to claim 1 above, and further in view of Gatto et al. (6,034,784).

With respect to claim 7, Hoffman and Witte teach all of the claimed elements as disclosed above, except for the scanner is a paper feed scanner. Gatto, also drawn to scanners, teaches a paper feed scanner (Abstract). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the paper feed apparatus of Gatto in the scanner of Witte, in order to ensure that documents are perfectly aligned before they are scanned (Abstract).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Carter whose telephone number is (571)272-0959. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Renee S. Luebke can be reached on (571)272-2009. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

wjc
02/01/06



RENEE LUEBKE
PRIMARY EXAMINER